Reviewer’s report

Title: A case report of iatrogenic deterioration of yet undiagnosed Rhombencephalitis; always be careful with corticoids.

Version: 0 Date: 06 Aug 2018

Reviewer: Sing Sing Way

Reviewer's report:

Review Summary

Overall, this paper describes an interesting and rare cause of meningitis/rhomboencephalitis in an immunocompetent adult. There is additional discussion regarding how use of corticosteroids may have contributed to the patient's death. However, this latter discussion is somewhat misplaced, since the delay is initiation of appropriate antimicrobials and obtaining food ingestion history probably contributed more to the clinical deterioration (compared with the use of corticosteroids). This point, along the patient's past medical history of the patient including last chemotherapy, should be discussed more clearly. The images are interesting and appropriate for the journal audience.

Background

Page 2, Lines 23: Please remove the phrase "until now" and capitalize and italicize "Listeria monocytogenes."

Overall, the introduction clearly states the basis for the case report.

Case Presentation

Page 2, Lines 40-41: The phrasing is slightly awkward for "progressive numbness around the mouth." I would recommend considering simplifying the language to "progressive perioral numbness."

Page 2, Line 46: I would recommend changing the phrase "initial diagnosis" to "initial diagnosis."

Page 2, Line 46: Was the patient diagnosed with a vertebrobasilar stroke or a TIA? This is not clear.
Page 2, Line 52: Depending on the intended audience, changing "liquor" to "CSF" may be helpful as the term is not used commonly in the USA.

Page 2, Line 59: The phrase "because a sudden Borrelia sero-conversion, in combination with a recent history of a tick bite,…" is awkward and unclear. Was the patient tested for Borrelia on admission and then again after being admitted for several days? How many days had the patient been ill by this time?

Page 3, Lines 4, 11, and 17: How different were the various states of hemiparesis ("subtle" from "distinct" from "full")? Were there any more objective measurements of strength, reflexes, etc?

Page 3, Line 21: The phrase "immediately after ICU admission" is unnecessary. I would recommend something like "Further interview with the family after ICU admission revealed…"

Page 3, Line 22: The sentence should say "information" instead of "formation."

Page 3, Line 26: Why amoxicillin instead of ampicillin for intravenous administration?

Page 3, Line 29: Please italicize the name of the organism Listeria monocytogenes. What day of illness was the culture drawn and what day of illness did the culture become positive?

Page 3, Line 34: The phrasing of the sentence suggests that the treatment being offered was inappropriate.

Page 3, Line 37: I recommend changing the word from "pyogenes" to "pyogenic."

Overall, the case is very interesting and illustrates the importance of appropriate antimicrobial therapy. Some of the phrasing is unclear and the overall chronology of the illness is confusing. I would recommend removing adjectives and adverbs such as "extremely," "immediately," and "even" as it does not add to the strength of the case.

Discussion

Page 3, Line 50: I recommend including an "and" between "days, frequently" to make the sentence more complete. The authors could also consider dividing the sentence into 2 separate sentences as it is quite long.

Page 3, Line 57: Please capitalize and italicize "Listeria."

Page 4, Lines 5-15: This is an important point that I think could be more strongly emphasized in a succinct way. Is there literature on what other hospitals have done (ie, algorithm with addition of fungal or more bacterial coverage after a certain number of days of illness, an interview checklist, etc)?
Page 4, Lines 16-26: Description of the epidemiology of listeriosis and rhomboencephalitis is interesting and important. This could probably be incorporated into the first paragraph, however, as some of the information seems redundant and there is a lack of flow between the above paragraph (lines 5-15) and this paragraph.

Page 4, Line 28: Consider changing "substitute" to "adjunctive" as the phrase otherwise implies that steroids are used instead of antibiotics.

Page 4, Lines 30-34: The paper by Brouwer mentions a decrease in mortality in Streptococcus pneumoniae meningitis as well as decreased hearing loss and neurologic sequelae in some groups but the mortality was not decreased overall for all groups. The authors concluded that corticosteroids may be useful in patients with bacterial meningitis in high-income countries although the data may be interpreted differently by readers.

Page 4, Lines 39-41: How many days did the patient have symptoms without antimicrobial therapy? I am more concerned that delay in appropriate antibiotics was a greater contributing factor than the steroids.

The discussion brings up the relative rarity of the disease and the literature on steroid use in meningitis which is interesting. Some of the phrasing is awkward, however, and lacks a smooth flow for the reader.

Conclusion

Page 4: Line 54: The sentence "Therefore a through interview is essential…" is a true statement but awkwardly worded.

References

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Tables and Figures

Picture 1: I recommend spelling out the full word initially for MRI FLAIR.

Picture 3: Please include any stains used and what the images show specifically such as mixed nuclear inflammatory infiltrates.

Overall, the multiple images were an appropriate addition to the case report.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

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Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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